Claims

What is claimed is:

1.   System comprising:

     a contactless label chipcard attached to a
5   product containing at least information for
identifying said product and said payment status
and a component for execution of the update of the
payment status of said product

     a device for reading and initiating update of
10   the payment status comprising at least:

        a contactless reader for reading
information stored in said contacless label
chipcard

15   a component for generating invoice based
on said information received from said
contactless label chipcard

        a component for checking payment of said
invoice

20   a component for initiating update of the
payment status.

2. System according to claim 1, wherein said label chipcard contains following information:

Label ID

Product ID

5   Payment status PAID or NOT PAID

AuthenticationKey

3. System according to claim 2, wherein said label chipcard additionally contains product price information.

4. System according to claim 2, wherein said 10 information are stored in the non-volatile memory of said label chipcard.

5. System according to claim 1, wherein said contactless reader comprising at least a component for sending to and receiving information from said label 15 chipcard.

6. System according to claim 5, wherein said contactless reader uses inductive coupling for data transmission.

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7.   System according to claim 1, wherein said contactless label chipcard comprises at least a component for sending to and receiving information from said contactless reader.

5   8.   System according to claim 7, wherein said contactless reader comprises at least a component for sending to and receiving information from said label chipcard, said contactless reader further comprising a generator for generating a RF-field whereby said contactless
10   reader and said contactless label chipcard uses said RF-field for data transmission.

9.   System according to claim 1, wherein said component for generating an invoice has access to enterprise data not contained in said label chipcard for generating an
15   invoice.

10. System according to claim 1, wherein said device for reading and initiating the update of the payment status further comprises:

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a data processing device with non-volatile memory for storing said a component for checking the payment of said invoice and said component for initiating the update of the payment status in said contactless label chipcard

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a data connection between said data processing device and said reader

a display device for displaying invoice information

a warning device for detecting not paid products.

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11. System according to claim 10 further comprises:

a contact card reader as payment means

a contactless card reader as payment means.

12. System according to claim 10, wherein said device for reading and initiating the update of the payment status is part of a check-out system.

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13. Contactless product label chipcard for use in a system according to claim 1 comprising at least:

a component for sending to and receiving information from a contactless reader

5 a non-volatile memory containing at least following information:

Label ID

Product ID

Payment status PAID or NOT PAID

10 AuthenticationKey

a component for execution of the update of the payment status by means of authentication.

14. A device for reading and initiating payment status for use in a system according to 1 comprising at least:

a contactless reader for reading information stored in said contactless label chipcard

5   a component for generating an invoice based on said information received from said contactless label chipcard

a component for initiating update of the payment status on said label chipcard

10   a data processing device for storing said a component for checking the payment of said invoice and said component for initiating update of the payment status in said contactless label chipcard

a data connection between said data 15   processing device and said reader

a display device for displaying invoice information

a warning device for detecting not paid products.

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15. Method for executing payments in a system as
claimed in claim 1 comprising the steps of:

     Detecting presence of a contactless label
     chipcard in the range of the contactless reader

5   Requesting product information from said
     detected label chipcard

Storing product information in a memory of said device

     Repeating aforementioned steps for all label
     chipcards detected in the range of said
10   contactless reader

     Generating invoice based on said information
     stored in said memory

     Execution of payment and examination of
     validity of said payment

15   Sending "RequestSetPaid" with authentication
     protocol information by said component for
     initiating update of the payment status via said
     contactless reader to a selected label chipcard if
     the payment was valid

20   Execution of said "RequestSetPaid" on said
     selected label chipcard by said component for
     execution the update of the payment status when

the authentication protocol information provided
with said "RequestSetPaid" is identical with the
authentication protocol information generated by
said label chipcard

5   Repeating execution step for all articles or
products covered by the invoice

           Inactivating said warning system.

16. Method according to claim 15 wherein said product
information contains a product identification ID and/or a
10   product price information.

17. Method according to claim 16 wherein said product
price information can be changed by an authorized device.

18. Method according to claim 15 wherein said invoice
is generated with further product data identified by means
15   of said information provided by said label chipcard.

19. Method according to claim 15 wherein the execution
of payment is supported by an user interface with different
option of payment.

20. Method according to claim 15 wherein the step of detecting presence of the label chipcard comprises the further steps:

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      detecting presence of a contactless payment chipcard in the range of the contactlesss reader

      offering use of the detected contactless payment chipcard for performing the the payment.

10   21. Method according to claim 15 wherein said authentication protocol information is a digital signature or a MAC.

22. Computer program product stored in the internal memory of a computer containing parts of software code for
15 performance of the method according to claim 15 if the product is implemented on the computer.

23. Computer program product stored in the internal memory of a computer containing parts of software code for performance of the method according to claim 17 if the
20 product is implemented on the computer.

24. Computer program product stored in the internal memory of a computer containing parts of software code for performance of the method according to claim 20 if the product is implemented on the computer.

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